Name:_____ Date:_____ Period:_____

Convert the point-slope equation $y-y_1=m(x-x_1)$ into the *slope intercept form* to find the y-intercept.

Example 1: Point 1 $(3,-2)$ slope $m=\frac{4}{3}$

1) $y-(-2)=\frac{4}{3}(x-3)$ Distributive Property

2) $y+2=\frac{4}{3}x-\frac{4}{3}\cdot 3$ and Simplify

3) $y+2=\frac{4}{3}x-4$ and Simplify, Use Properties of Equality

4) $y+2-\mathbf{2}=\frac{4}{3}x-4-\mathbf{2}$ and Simplify to $y=\frac{4}{3}x-6$ **Slope-Intercept Form**

1.	(1,2) $m=-2$

2.	(3, 2) $m=-1$

3.	(3, 2) $m=\frac{-4}{3}$

4.	(-5,-4) $m=\frac{1}{2}$

5.	(5,0) $m=\frac{1}{5}$

6.	(0,0) $m=\frac{-1}{3}$